

TV

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REICHERT

CLOSED CIRCUIT TELEVISION MICROSCOPY SYSTEM



REICHERT Microscope "NEOPAN"
with PYE TELEVISION CAMERA and MONITOR

CLOSED CIRCUIT TELEVISION MICROSCOPY SYSTEM

INTRODUCTION: A complete closed-circuit television system consists of the Television Camera, Monitor, Demonstration Eyepiece, Microscope, and Camera Stand. These components are described herein.

TRANSISTOR CLOSED-CIRCUIT TELEVISION CAMERA (Type TVCI)

TELCAM The Pye "Lynx" is a closed circuit television camera designed to produce high definition pictures, horizontal resolution at least 450 lines, when used in conjunction with either video monitors or ordinary television receivers.

The camera is a completely self-contained unit, easily portable; the use of transistors throughout, together with printed circuit board techniques, has resulted in an extremely compact, lightweight construction.

Simplicity of operation, too, has been achieved in the "Lynx" - only three controls make electrical adjustment as simple as that of the familiar TV receiver. A special deviating prism, permanently aligned to the vidicon mask, permits convenient and rapid interchange between microscopes.

The camera operates on the 525 lines system with 60 fields per second, random interlaced, the dual outputs of video and radio frequencies being simultaneously available for use. At video frequency, a 1.4 V peak-to-peak composite signal of standard polarity is available. The r.f. signal, video only, of at least 200 mV peak-to-peak into 75 Ohms and adjustable to TV channels 2 or 3, is capable of feeding a single receiver at a distance of 3000 feet (1 km) without loss of picture quality; or alternatively, a number of receivers may be supplied over a shorter distance using a suitable distributor. Includes 10 feet of 75 Ohm video cable with connectors for mating to Pye video monitor.

For 110-140 and 220-250 Volts, 60 cycles, 13 Watts

6-CHANNEL VIDEO MONITOR (17", Type 171)

TELMON The Pye 171 Video Monitor with a 17" diagonal screen is suitable for general use in closed-circuit television systems using the standard of 525 lines, and has been designed especially for use in conjunction with the Pye transistor cameras.

The monitor operates on the 525 lines scanning standard from a composite video signal input of standard polarity.

On the front control panel a switch makes possible the selection of any one of up to six inputs which may be connected into the monitor at one time, thereby eliminating the need for plugging and unplugging leads. Thus, a number of cameras sited at various points may have their pictures selected for display on the monitor-screen consecutively or at random by the operator. Brightness and contrast controls are also fitted on the front panel for the operator's convenience.

Input circuits are adjustable to provide for either high impedance bridging (when more than one monitor is required in a chain) or low impedance termination of the incoming lines.

The Pye 171 monitor is self-contained and is housed in an attractive two-tone cabinet of high strength polystyrene finished in grey and white.

For 110-140 and 220-250 Volts, 60 cycles, 140 Watts.

DEMONSTRATION EYEPIECE

- BIZOK We highly recommend the acquisition of this inclined demonstration eyepiece since it offers you the following advantages:
- 1) Convenient focusing and direct eyepiece observation of the microscopic image while the image is projected on the television screen.
 - 2) The built-in pointer of the eyepiece can be projected and directed to any area of the television screen; an invaluable aid during lectures and for classroom work.
- The initial magnification of the eyepiece is 9x.

MICROSCOPE

While this television camera may be used with any standard upright type microscope, we can highly recommend the acquisition of a REICHERT Model "RC" or Model "Neopan" microscope for this work. We submit in the following brief descriptions of these two microscopes. Our specifications include three achromatic objectives.

In our following specifications we have also included monocular observation tubes and eyepieces so that you may be able to use these microscopes for routine microscopy.

For a complete description of these microscopes please consult our separate literature.

- RECTEL MONOCULAR MICROSCOPE "RC", grey finish, dual sided coarse and fine adjustment, fine adjustment graduated at intervals of 2 micron. Microscope arm with self-locking inclination joint. Straight Monocular Tube. Substage with rack and pinion height adjustment. Built-On Square Mechanical Stage #29, stage plate 120 x 125 mm, coordinate motions 30 x 75 mm. Two sets of scales and verniers reading to 0.1 mm. Two specimen stops: one straight rigid, one curved with spring. Two specimen stage clips #425. Two-Lens Abbe Condenser, N.A. 1.25, detachable front lens, condenser sleeve with aperture iris diaphragm and swing-out filter holder for filters 30.8 mm dia. Substage Lamp "Lux TB" for direct connection to mains, with 2 bulbs, 110 Volts, 25 Watt. Yellow Filter GG 11/2 mm. Quadruple Nosepiece. Widefield Eyepiece, 10x. Three Achromatic Objectives:
- | | | | |
|-----|--------|-----------|-----|
| 4x | 30 mm | 0.08 N.A. | dry |
| 10x | 16 mm | 0.25 N.A. | dry |
| 40x | 4.4 mm | 0.65 N.A. | dry |

- NEOTEL MONOCULAR MICROSCOPE "NEOPAN", grey finish, 2 in 1 rapid focusing system for coarse and fine focusing, ball bearing system, condenser carrier adjustable in height by rack and pinion, tube head with ball bearing quadruple revolving nosepiece, frosted daylight filter and plastic cover. Straight Monocular Photographic Tube, interchangeable with observation tubes, magnification factor 1x. Inclined Monocular Observation Tube, rotatable through 360°. Magnification 1x. Built-In Square Mechanical Stage #25, 115 x 135 mm stage surface, coordinate motions 50 x 75 mm with low-positioned co-axial drive knobs, removable specimen holder with one fixed and one hydraulic bow type arm. Two-Lens Abbe Condenser, 1.25. N.A., with aperture iris diaphragm and filter holder. Mains Type Substage Lamp "Lux NT", lamp housing with collector lens, 1 tungsten filament bulb, 25 Watts, for 110 Volts, 60 cycles, AC. Yellow Filter GG 11/2 mm. Widefield Eyepiece, 10x. Three Achromatic Objectives:
- | | | | |
|-----|--------|-----------|-----|
| 4x | 30 mm | 0.08 N.A. | dry |
| 10x | 16 mm | 0.25 N.A. | dry |
| 40x | 4.4 mm | 0.65 N.A. | dry |

CAMERA STAND

STATEL Solid Metal Baseplate mounted on shock absorbers, accommodates any standard microscope. Vertical column allows adjustment of the horizontal arm to any desired height. The camera supporting arm is swivel mounted for fast convenient alignment to microscope. The entire stand is of rigid vibration-free construction.

COMPLETE SYSTEMS

TELCAM	Television Camera	\$975.00
TELMON	Video Monitor	385.00
BIZOK	Demonstration Eyepiece	143.50
STATEL	Camera Stand	115.00
RECTEL	Microscope Model "RC"	<u>386.50</u>
		<u>\$2,005.00</u>

TELCAM	Television Camera	\$975.00
TELMON	Video Monitor	385.00
BIZOK	Demonstration Eyepiece	143.50
STATEL	Camera Stand	115.00
NEOTEL	Microscope Model "NEOPAN"	<u>530.00</u>
		<u>\$2,148.50</u>

PRICES IN EFFECT AT TIME OF SHIPMENT WILL APPLY - E. & O. E.

TERMS: FOB CALDWELL, N.J. - 1% 10 DAYS, NET 30 DAYS

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